



NUCLEAR ENERGY INSTITUTE

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Director,
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February 25, 2000

Ms. Wendy Dixon
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M/S 010, U.S. Department of Energy
Office of Civilian Radioactive Waste Management,
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SUBJECT: Nuclear Energy Institute (NEI) comments on the Draft Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca, Mountain, Nye County, Nevada

Dear Ms. Dixon:

The Nuclear Energy Institute (NEI),¹ on behalf of the nuclear energy industry, is pleased to submit these comments to the Department of Energy (DOE) on the Draft Environmental Impact Statement (DEIS) - *Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca, Mountain, Nye County Nevada*, (64 Fed. Reg. 44,200- August 13, 1999).

This document is an important component of the Yucca Mountain decision-making framework. It constitutes the most recent and comprehensive summary of the impressive scientific research effort that DOE has conducted at Yucca Mountain over the past two decades. DOE has thoroughly evaluated the proposed action, which is vital to the national interest, and has found the environmental impacts to be so small as to have essentially no adverse impact on public health and safety. Long term radiation levels associated with the

¹ NEI is the organization responsible for establishing unified nuclear industry policy on matters affecting the nuclear energy industry. NEI's members include all utilities licensed to operate commercial nuclear power plants in the United States, nuclear plant designers, major architect/engineering firms, fuel fabrication facilities, nuclear material licensees, and other organizations and individuals involved in the nuclear energy industry.

repository are shown to be less than 1% of naturally occurring background. It is also notable that DOE has reached this conclusion with a high degree of conservatism in its research. This is reflected in Appendix K of the DEIS in which DOE states that the impacts of potential radiation doses to the public near Yucca Mountain estimated in the DEIS “should be viewed as conservatively high; in fact, the uncertainties are such that the **actual level of impact could be zero.**” [emphasis added]

This DEIS should serve to facilitate DOE’s continued efforts towards a national policy decision on Yucca Mountain next year as indicated in the DOE’s 1998 Viability Assessment of Yucca Mountain, based on a competent technical and scientific analysis.

NEI and the nuclear energy industry have extensively reviewed this DEIS. The enclosed comments are offered to help DOE strengthen its presentation of the compelling scientific evidence, embodied in this document, that Yucca Mountain can effectively protect public health and safety.

DOE’s comprehensive evaluation of the proposed action provides a sound basis in scientific fact and state-of-the-art analysis for concluding that the short- and long-term environmental impacts of the proposed repository are small. A broad communications effort to convey this point to the public should be undertaken by the Energy Department. Accordingly, DOE should enhance its presentation of this conclusion by providing greater clarity and synthesis of its results. We offer the following recommendations for accomplishing this:

- The final EIS should better explain the key steps leading up to its preparation in order to place the document in its proper context.
- The final EIS should summarize the analytical and scientific processes that led to its results.
- The final EIS should better synthesize results to place both radiological and non-radiological risks in perspective by giving readers a basis for comparison.

DOE has rigorously followed the requirements of the National Environmental Policy Act (NEPA) and Nuclear Waste Policy Act (NWPA) in preparing this DEIS. The agency’s decision not to consider alternatives to Yucca Mountain in this EIS is completely consistent with the roadmap for completion of the NEPA process provided by Congress in the NWPA. DOE also has adequately addressed the issues and concerns raised during the EIS scoping period, comprehensively discussed the environmental impacts of the proposed action, and provided broad opportunity for public comment.

DOE has presented two “no action alternative” (NAA) scenarios in this DEIS that comprehensively bound the range of no action possibilities. There is no need, as suggested by some, for DOE to attempt to define and evaluate specific “more likely” scenarios within these bounds. Such additional analysis would not provide readers with any better means to make a comparison than that already given. The human health impacts of the proposed action are shown to be lower than the lowest possible health

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impacts of "no action" (Scenario 1) and the cost impacts of the proposed action are shown to be lower than the least costly "no action" possibility (Scenario 2). Instead of additional NAA analysis, the industry recommends that DOE augment the basis for comparison provided by this DEIS by discussing the impacts of the proposed action in the perspective of known and existing risks so that the proposed repository might be more effectively judged on its own merits.

Our enclosed comments explain each of the above topics in greater detail and also provide, for DOE's consideration, the following input:

- A statement concerning environmental benefits of the proposed action not addressed by this DEIS.
- Concerns regarding the extent to which DOE has overestimated several of the impacts described in this DEIS.
- Our basis for concluding that this DEIS adequately bounds the impacts of pending design changes.
- Our basis for concluding that the evaluation of transportation impacts in this DEIS is sufficiently thorough and bounding.
- Specific technical comments.

NEI looks forward to maintaining an active ongoing dialogue with DOE on items of mutual interest with respect to the proposed Yucca Mountain repository as the project moves closer to a suitability decision. We would be pleased to address any questions the agency may have on our comments.

Sincerely,



Steven P. Kraft

Enclosure

c: The Honorable Ivan Itkin, PhD., Director, DOE OCRWM
Mr. Lake H. Barret, Deputy Director, DOE OCRWM
J Russell Dyer, PhD., Manager, DOE Yucca Mountain Project

The Honorable George Frampton, Chairman, Council on Environmental Quality
Mr. William F. Kane, Director, NRC NMSS
Mr. Richard E. Sanderson, EPA Director of Federal Activities